REMARKS

The Office Action mailed on June 14, 2006 has been carefully considered, and the Examiner's comments are appreciated. Claims 1 and 5 have been amended to clarify ambiguities. Claims 6 and 8 have been amended to depend from claim 1 and claims 7 and 9-11 have been cancelled and thus are withdrawn from consideration. Support for the amendments is located, inter alia, in Applicants' specification, for instance, in paragraphs [0021] and [0023], and the claims.

Applicants herein do not traverse the restriction requirement as related to Groups II, III, and IV. Claims 1-5 have been rejected under 35 USC 103 for obviousness, and claim 5 has been rejected under 35 USC 112, second paragraph, for lack of antecedent basis.

Also, accompanying this communication is a petition to extend the prosecution for one month to October 16, 2006, along with the appropriate fee.

Discussion of Rejection of Claims 1-5 under 35 U.S.C. §103

The Examiner rejected claims 1-5 under 35 USC §103(a) as being unpatentable over Kaschmitter et al. (US 5789338) in view of Boes et al (US 5807494). The Examiner argues that the Kaschmitter reference teaches a process of making a carbon electrode comprising: providing a solution of organic aerogel or xerogel precursors including a phenol, resorcinol, or catechol and formaldehyde; gelling the precursor mixture to form a composite gel; drying the composite gel; and pyrolizing the composite gel to form an aerogel/carbon composite or a xerogel/carbon composite. Citing col. 8, line 1 to col. 9, line

27 of Kaschmitter et al. The examiner acknowledges that the reference does not expressly teach adding ceramic materials, glassy materials, or carbon materials.

The examiner applies the Boes reference as a teaching of adding a carbonaceous component to a precursor solution to form a precursor mixture. Citing col. 3, lines 37-42 and col. 13, lines 41-44, of Boes. The examiner's position, as understood, is that one of ordinary skill in the art would modify the Kaschmitter organic aerogel/xerogel precursors to include a carbonaceous component in order to improve the performance properties of the electrode by lowering the dielectric constant.

The combination of references do not disclose or suggest the preparation of Applicants'claimed reinforced rigid anode monolith. The addition of a carbonaceous component by Boes is not disclosed or suggested to assist in the integrity of any finished anodic solid materials resulting from processing of materials of Boes. Kaschmitter's aerogels and xerogels are taught to be useful in supercapacitors and strive for relatively high electrical conductivities. However, Kaschmitter does not disclose or suggest a need for additional reinforcement of it materials. The examiner has applied hindsight reasoning, utilizing Applicant' specification as the guideline rather than the motivations within the cited references.

Furthermore, the Boes reference is flawed with respect to providing teaching of any pyrolysis of its materials once prepared, or any benefits that can be derived from pyrolyzing its material once incorporated, even if possible, into the Kaschmitter aerogels or xerogels. Applicants' materials function as a rigid monolith that is continually exposed to high temperature alkali carbonate mixtures and over time is consumed as a fuel. Therefore, Applicants' ceramic materials; glassy materials based on borates, phosphates, or silicates

with alkaline earth or transition metal cations; and/or carbon materials are added to provide "internal support to the carbon anode" which would otherwise fall apart. It is important to note that Applicants make no effort to get such additive materials to react covalently or ionicly with the aerogels, xerogels or their precursors, as does Boes. Central to Boes' process is a requirement for carbon black (or possibly other carbon materials) to react with one of several molecules that have "at least one ionic group [and] at least one aromatic group...", which creates carbonaceous matter that in turn can react with various gels (none of which seem to be aerogels or xerogels) allowing them to exhibit improved properties. Here again it is important to note that apparently just adding carbon black to the gel without its first reaction with one of Boes' "cross linkers" doesn't improve the properties of the gel. In fact, even after such a "linker" reaction, improved properties may not be evident unless these materials are mixed in just the right quantities at just the right conditions. Therefore, it is difficult to see how one of ordinary skill in the art would turn to Boes' as a source of information about how, when , or if, to add ceramics, borates, silicates, etc. to Kaschmitter's aerogels or xerogels.

More specifically, the examiner cites two areas of the Boes reference to buttress his position. (1) Boes, at column 13 lines 41-44 is part of his Example 12 where Modified CB-A, a material modified for such a purpose, is reacted with a gel to achieve improved properties. However, to get these improvements carbon black had to be modified in a detailed procedure outlined in Example 1 in Column 10. Such disclosure does not disclose or suggest utilizing it in combination with Kaschmitter's process. (2) Boes, column 3 lines 37-42 makes a rather general statement that "The carbonaceous components of the gel composition of the present inventions may be selected from the group consisting of: a carbon blacks attachable to a gel component, carbon fibers attachable to a gel component,

and activated carbons attachable to a gel component, and graphitic carbons attachable to a gel component." But the rest of the paragraph goes on to say that: "(C)ertain carbonaceous components will not become attached to a gel component unless modified. Preferably, the carbonaceous component is chemically modified in the following manner... ." The balance of Boes then goes on to describe in detail the modification process and why these modified compounds work while unmodified materials apparently don't. Accordingly, nowhere is there any indication why, how and where such unmodified materials might work--is not enabling.

In light of the foregoing, a prima facie case of obviousness has not been established and the obviousness rejection should be withdrawn.

Discussion of the Rejections Under 35 USC §112

The Examiner rejected claim 5 under 35 USC §112 citing insufficient antecedent basis for limitation of the claim. Applicants have amended claim 5 to provide antecedent basis for the carbon materials. Applicants request that the rejection be withdrawn.

Summary

Applicants therefore respectfully submit that claims 1-6 and 8 are in condition for allowance, and requests allowance of the claims. In the event that the Examiner finds any remaining impediment to the prompt allowance of these claims that could be clarified with a telephone conference, he is respectfully requested to initiate the same with the undersigned at (925) 422-7274.

Respectfully submitted,

Dated: October 16, 2006 By:

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